

the order of family right to the craft, was severely criticized and socially punished by his family and even by his neighbors. The informant was in doubt as to whether the confirming chief would override such an illogical choice.

If the male members in the family of a *tufunga* lack aptitude, ambition, or any other necessary quality, or show decided inferiority in comparison with someone outside the family, this outsider, following a presentation of gifts to the *tufunga* (from the applicant's family), may be chosen to succeed to the order. This appointee's sons then continue to carry on the particular *tufunga* tradition and practice.

All the people of a village contribute toward the building of the chief's house under the direction of a single *tufunga*.

Some living representatives of *tufunga* families in Lifuka Island, Haapai, are as follows:

Josiah Paluto, *tufunga langafale* and *tufunga lalava*, his father, Job Femuiki, his grandfather and his great-grandfather were also *tufunga*; Ngauamo, *tufunga vaka*; Femuiki, *tufunga langafale*; Mailau Fuopau, *tufungataomaka*.

According to a Vavau informant, carpenters were called the "Children of Tangaloa Tufunga," that is, "Tangaloa the Artisan." A tradition states that before the time of Ulukalala, the carpenters were driven from Vavau during a war and went to Fiji to settle and that there they built a fort, so strong that the Fijians could not take it. This brief snatch of legend suggests a sort of organization on the part of the carpenters, but at the present time there is nothing in the nature of a carpenters' guild.

Only one person in a family held the title which went with a trade. As usual, the title seems to have descended most frequently from the father to the eldest son. Thus the predecessor of Eke, a boat builder of the Hihifo district, Tongatabu, was his mother's father, who also was Eke—a title which is bestowed by the chief Ata. The present Eke had the title conferred upon him by the present Ata. Eke is of Samoan extraction and of *matapule* rank; in fact, the name Eke is a *matapule* name. An ancestor of the present Eke is believed to have come from Samoa in the time of Tohuia, the Samoan mother of Ngata, the first Tui Kanokupolu.

The father, paternal grandfather, and a great-grandfather of Fakauho, another house builder of the Hihifo district, all bore the same title and were all carpenters. The present Fakauho, popularly known as Fiso, had his title conferred upon him by the present Ata about 1910. Fakauho is also a stone mason and constructs stone burial vaults (*fonualoto*). Should the chief Ata want a house built, he orders the Fakauho to do the work. Fakauho's assistants are his relatives, but Ata orders commoners to help in the rough and heavy work.

the identical form, indeed, that they had in the older type, the *tongiaki*. Whether Paris' figures are correct in this particular is uncertain; in details his figures sometimes show minor inaccuracies, though as already stated there probably was a transitional period when old *tongiaki* hulls were adapted to the new design borrowed from Fiji. A model which I saw being made in Lifuka in 1925 for the Prince Consort by an old Tongan carpenter had the Fijian form of head and stern, and the builder, who was reputedly 93 years of age and the last survivor of the old carpenters' guild, asserted that such was the normal and correct shape.

Another difference to be noted is that Paris figures the heel of yard as stepped in a hole at the extreme end of the hull (fig. 188, a, 7), instead of lashed against an angular ridge socket not quite so far forward. As Krämer (1902-3, vol. 2, p. 258) shows the heel of the yard in the Samoan *'alia* to be stepped similarly (fig. 171), the probability is that this particular difference in design did exist in Tonga as well as in Samoa.

The double canoe has long been extinct in Tonga, longer indeed than in Samoa, but occasionally, as in Hawaii and Tahiti, two small dugout hulls are temporarily joined together at some few feet apart by two cross booms lashed athwart the gunwales. One of these is seen in a photograph taken from the "Albatross" in 1899, as she lay in Vavao Harbor (U.S. National Museum negative no. 40181). It is noteworthy that the *bobao* hulls are connected head to stern, as in the double canoes of Manihiki.

TECHNICAL TERMS

According to the old carpenter in Lifuka, many of the principal terms for the various parts were common to Fiji and Tonga, either the same or with the substitution of Tongan words for Fijian when these were descriptive. The more important of these in the two languages are the following (Fijian in parentheses):

Fana (vana): mast.
Fohe (vothe): paddle.
Fohe uli (vothe uli): steering paddle.
Fohe-lahi-matau (?): starboard steering paddle; literally the "large right-side paddle".
Fohe-i-hama (?): left side steering paddle.
Fono (vono): strake or run of planking.
Fono tabu (vono tambu): garboard strake.
Fono bajini vaka (vono laulalo): strake above garboard strake (*bajini*, a necklace made of whale's teeth).
Fono ngutu vaka (vono mbati ni wangga): topmost strake (*mbati*, the mouth, i.e. the open well of the hull).
Hama (thama): the smaller hull.

Hua (sua): scull.
Katea (kata): the larger hull.
Kiato (kaso): cross boom.
La (lathe): sail.
Takele (takele): basal or keel region.
Taumua (taumua levu): fore end or decking.
Taumuli (taumua lailai): after end or decking.
Toko (ndeko): poling stick or quant.
Tomotomo (tomotomomo): topmast.
Tuku (tuku): running fore and back stays of mast, also as a verb, "to slacken" or "to let go".
Vilinga hua (?): sculling hole in platform.

RAFTS

A persistent tradition prevails in Tonga to the effect that in former times rafts were employed in navigation. According to information given by Havea, the name *cukavaka-amei* was applied to this primitive kind of craft. He describes it as a shaped raft with side logs boomed out after the fashion of a double outrigger. He states that his father told him that he had seen a small one made of three logs: the median one was longer than the two lateral ones, which were separated from the median by a space, the whole being kept in position by several poles (*kiato*) laid athwart the three logs and lashed thereto. In larger examples it is said that there was more than one log on each side. Probably if more logs were employed